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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/771,140	01/26/2001	Hans-Clemens Steffel	P 6104.1 US	6742

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EXAMINER

PHAM, TOAN NGOC

ART UNIT	PAPER NUMBER
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2632

DATE MAILED: 10/23/2002

8

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/771,140

Applicant(s)

STEFFEL, HANS-CLEMENS

Examiner

Toan N Pham

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 August 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by Schmidt (US 5,570,127).

Regarding claim 1: Schmidt discloses a monitoring device for vehicles comprising a housing (45); a mirror glass (20) arranged in the housing (45) so as to have a front side facing an observer (Fig. 1); a mirror glass (20) comprising a reflective layer (36) being reflective in the visible spectra range of light; a camera (12) arranged behind the reflective layer (36) in a view direction from the front side; wherein the camera (12) takes images through the reflective layer (36) (col. 2, lines 45-67; col. 3, lines 1-18; Figs. 1-3).

Regarding claim 3: Schmidt discloses the mirror glass (20) is a conventional mirror glass (Fig. 1-3).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

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the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schmidt (US 5,570,127) in view of DeVries, Jr. et al. (US 6,158,655) (of record).

Regarding claim 2: Schmidt does not disclose the claimed reflective layer is selected from the group consisting of an interference reflective layer, a chromium reflective layer, a titanium reflective layer, and a titanium-chromium reflective layer; however, Schmidt discloses a reflective surface (36) (col. 2, lines 60-64). DeVries discloses a rearview mirror assembly (10) including a housing (14) and a reflective element (16) which may comprise a metallic reflector coated glass substrate, such as with a thin chromium or chromium alloy reflector coating (col. 4, lines 46-54). Since both Schmidt and DeVries disclose rearview mirror assemblies comprising a reflective layer, it would have been obvious to one of ordinary skill in the art to incorporate the use of a chromium reflective layer, as taught by DeVries in a system as disclosed by Schmidt for providing an alternative method of design to produce a mirror-type reflection.

Claims 4-10 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schmidt (US 5,570,127) in view of DeLine (US 6,278,377) (of record).

Regarding claim 4: Schmidt does not disclose the claimed electrochromic mirror glass; however, Schmidt discloses a reflective surface (36) (col. 2, lines 60-64). DeLine discloses the claimed mirror glass is an electrochromic mirror glass (col. 5, lines 58-67). Since both Schmidt and DeLine disclose rearview mirror assemblies comprising a

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reflective layer, it would have been obvious to one of ordinary skill in the art to incorporate the use of an electrochromic mirror glass, as taught by DeLine in a system as disclosed by Schmidt for providing an alternative method of design to produce a mirror-type reflection.

Regarding claim 5: DeLine discloses the claimed auxiliary lighting unit configured to provide additional light for the camera, which is met by an illuminating is provided (preferably, mounted at and illuminating from the mounting site of the camera itself) by one or more near-infrared illumination sources (col. 10, lines 6-30).

Regarding claim 6: DeLine discloses the claimed auxiliary light unit emits light of a wavelength able to pass through the reflective layer, which is met by an illuminating is provided (preferably, mounted at and illuminating from the mounting site of the camera itself) by one or more near-infrared illumination sources (col. 10, lines 6-30). The illuminating sources such as a light emitting diodes which emit efficiently in the near-infrared portion such that the interior cabin of the vehicle may be illuminated with radiation in a range which the camera is sensitive to.

Regarding claim 7: DeLine discloses the claimed auxiliary light unit emits light having wavelength outside the visible spectra range of light, which is met by an illuminating is provided (preferably, mounted at and illuminating from the mounting site of the camera itself) by one or more near-infrared illumination sources (col. 10, lines 6-30). The illumination sources such as light emitting diodes which emit efficiently in the near-infrared portion, both which do not emit efficiently in the visible portion (wavelength below approximately 0.75 microns) (col. 10, lines 6-30).

Regarding claims 8 and 9: DeLine discloses the claimed lighting unit comprises light emitting diodes, which is met by the illuminating sources such as light emitting diodes which emit efficiently in the near-infrared portion (col. 10, lines 6-30).

Regarding claim 10: DeLine discloses the claimed auxiliary lighting unit arranged behind the reflected layer in the viewing direction, which is met by illuminating provided (preferably, mounted at and illuminating from the mounting side of the camera itself) (col. 10, lines 6-30).

Regarding claim 12: DeLine discloses the claimed housing and the mirror glass from an interior has a rim, and wherein the auxiliary lighting unit comprises light-emitting diodes arranged on the rim of the housing, which is met by mirror assembly (16) including an electro-optic or electrochromic reflective element (16d). The mirror assembly (16); an indicator (72), such as a light emitting diode, mounted at, in or on adjacent the bezel (16e) (col. 5, lines 58-65; col. 7, lines 15-19; col. 8, lines 55-60).

Claims 11, 17, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over DeLine et al. (US 6,278,377) (of record) in view of Roberts (US 5,355,284).

Regarding claim 11, although DeLine does not specifically disclose the claimed auxiliary lighting unit comprising light-emitting diodes arranged in a matrix of rows and columns, he does disclose an illuminating is provided (preferably, mounted at and illuminating from the mounting site of the camera itself) by one or more near-infrared illumination sources. The illumination sources such as light emitting diodes which emit

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efficiently in the near-infrared portion such that the interior cabin of the vehicle may be illuminated with radiation in a range which the camera is sensitive to (col. 10 lines 6-30). Roberts discloses a mirror assembly 10 including an array or bank of LEDs 71 mounted in an array (col. 10 lines 16-29 and Fig. 5). Since DeLine discloses a mirror device including light emitting diodes placed within the housing, it would have been obvious to one of ordinary skill in the art to incorporate the design of placing DeLine's light emitting diodes in a matrix of rows, as disclosed by Roberts, to provide an evenly distributed amount of light throughout the housing for the camera to enhance illumination to pick up images outside of the mirror housing.

Regarding claims 17, 18, although DeLine does not disclose the claimed at least one camera comprising a low light level intensifier, he does disclose an illuminating is provided (preferably, mounted at and illuminating from the mounting site of the camera itself) by one or more near-infrared illumination sources. The illumination sources such as light emitting diodes which emit efficiently in the near-infrared portion such that the interior cabin of the vehicle may be illuminated with radiation in a range which the camera is sensitive to (col. 10 lines 6-30). Roberts discloses a control circuit would intensify the light output when the electrochromic mirror was dimmed (col. 17 lines 1632). Since DeLine discloses a mirror with light emitting diodes within the housing used to provide near-infrared illumination for the camera mounted within the housing, it would have been obvious to one of ordinary skill in the art to incorporate a light level intensifier, such as the means for adjusting the light as disclosed by Roberts, with the

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system of DeLine, to ensure that the right amount of light will be illuminated for the camera to operate based on the level of light within the cab of the vehicle.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over DeLine et al. (US 6,278,377) (of record).

Regarding claim 13, although DeLine does not disclose the claimed rim is comprised of a material that is opaque to the human eye, he does disclose a mirror assembly 16 including a bezel 16e (col. 5 lines 58-65). Since DeLine's system is concerned with light from within the housing not being transmitted from outside of the housing, it would have been obvious to one of ordinary skill in the art to provide a rim (bezel) that is opaque to ensure that the light for the camera stays within the housing.

Claims 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over DeLine et al. (US 6,278,377) (of record) in view of Bague (US 6,246,933).

Regarding claim 14-16, although DeLine does not disclose the claimed image transmitting fiber bundle connected to the at least one camera, he does disclose an interior rearview mirror including a camera and/or display for providing an image of an area not viewable by the rearview mirror when it is adjusted for driving conditions (col. 10 lines 6-11). Bague discloses rear view mirror 14 comprising a video/audio camera 13. The signals from the video are modulated for transmission via an optical fiber cable to an advanced video box 10 under the driver's seat 11 (col. 15 lines 49-55). Since DeLine discloses a camera within a rearview mirror to capture images and display them

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to the driver, it would have been obvious to one of ordinary skill in the art to incorporate a transmitting fiber bundle, such as the fiber cable of Bague's, with the system of DeLine, to provide a discrete means for easily transmitting captured images from the camera to a remote location.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art of Secor (US 5,289,321), Rayner (US 6,405,112), Schofield et al. (US 5,550,677), and Schofield et al. (US 6,302,545) are cited to show a variety of rearview mirror assembly.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(á). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Toan N Pham whose telephone number is (703)306-3038. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffery A Hofsass can be reached on (703) 305-4717. The fax phone numbers for the organization where this application or proceeding is assigned are (703)872-9314 for regular communications and (703)872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-4700.

Toan Pham

A handwritten signature in black ink, appearing to read 'Toan Pham', with a long horizontal flourish extending to the right.

October 18, 2002